

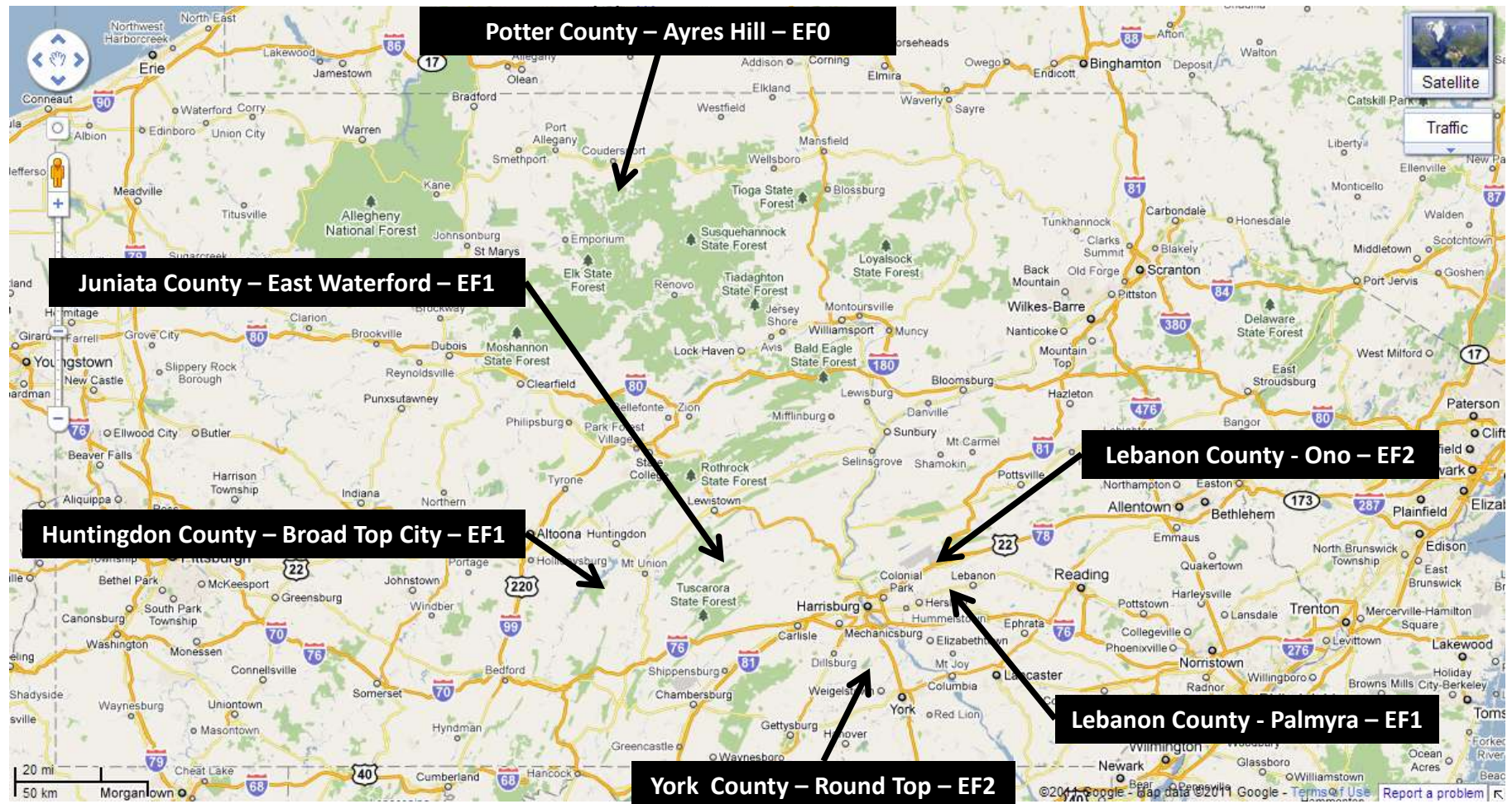
Central Pennsylvania Tornadoes

April 27-28, 2011

A fast-moving upper level impulse and attendant surface low pressure system moved across the Great Lakes Region. An unseasonably warm and relatively moist air mass (surface temperatures in the 70s to low 80s and dewpoints in the upper 50s) resided over central Pennsylvania in advance of this system and aided in strong destabilization. The moderate instability combined with strong vertical wind shear profiles promoted organized thunderstorms with supercells and bowing line segments. Although large hail and damaging winds were the main threats, sufficient low-level wind shear was present to support isolated tornadoes. A tornado watch was issued around 1500 EDT on 27 April 2011. The tornado threat continued through the evening and into the overnight and early morning hours on 28 April 2011. By this time, thunderstorms had evolved into largely north-south oriented clusters or broken lines with embedded supercell structures. The storms finally exited the region by mid-morning on 28 April 2011.

Confirmed Central Pennsylvania Tornadoes

April 27, 2011 – April 28, 2011



- Date: 4/27/11
- Time: 6:26 pm EDT – 6:28 pm EDT
- Rating: EF0
- Max Wind: 65 mph
- Max Path Width: 25 yards
- Path Length: 1.85 miles
- Starting Lat/Lon: 41.7209, -77.9871
- Ending Lat/Lon: 41.7442, -77.9693
- Injuries: 0
- Fatalities: 0

Potter County

“Ayres Hill Tornado”



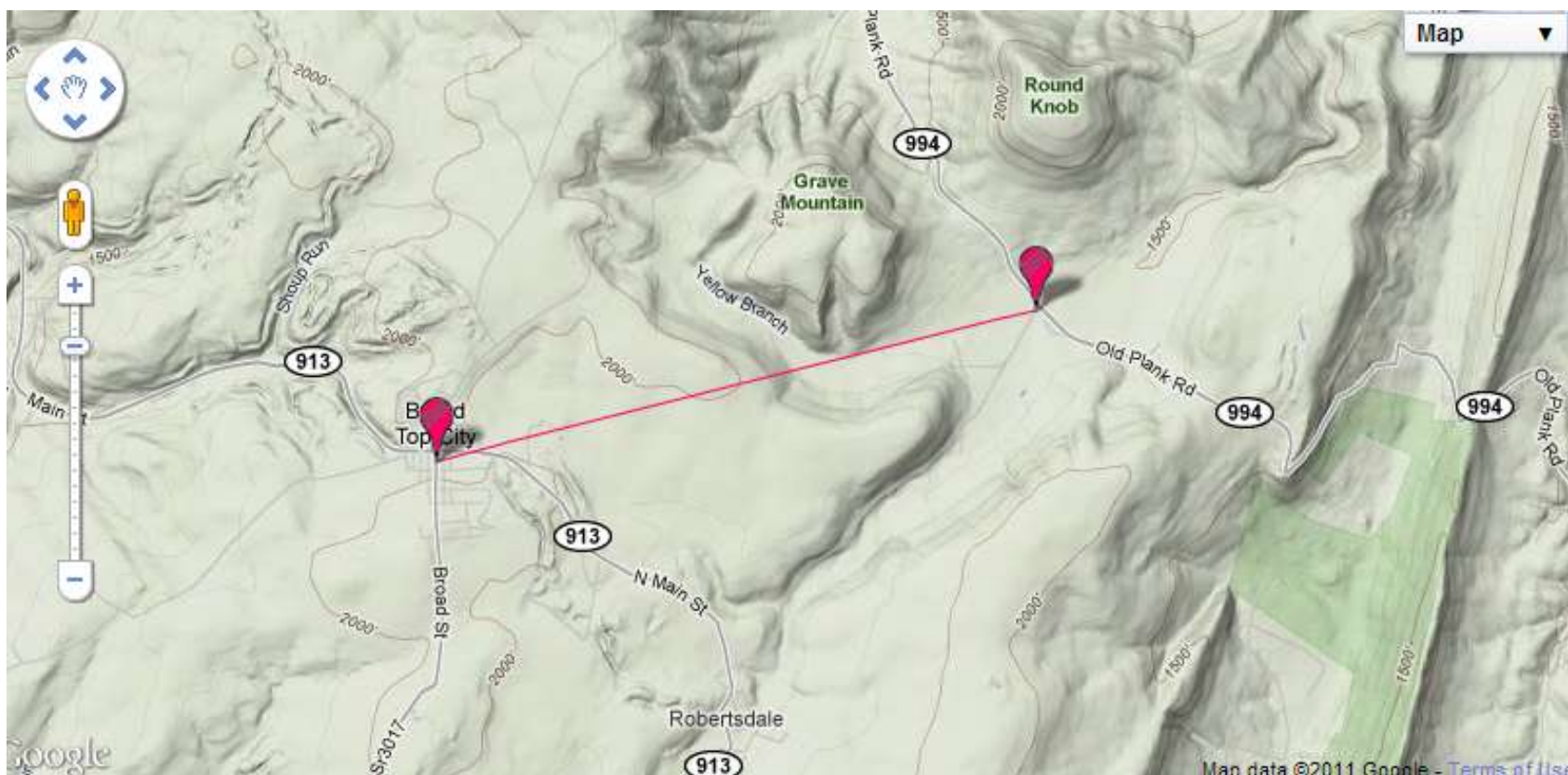
Potter County – “Ayres Hill Tornado”

- A brief EF0 tornado skipped across southwest Potter County during the evening hours of 27 April 2011. Field surveys conducted by the National Weather Service in State College and Potter County Emergency Management officials revealed that damage caused by the tornado was minimal, only knocking down scattered to isolated trees along a two mile path. The path of the tornado was through a heavily wooded and desolate area. Confirmation of the tornado was made primarily through eyewitness accounts and photographic evidence, which was provided by county Emergency Management officials. Due to the lack of a well-defined damage path and limited photographic evidence, the tornado appears to have touched down briefly in several locations with sporadic tree damage in several locations along the path. The damage observed was consistent with maximum winds of 65 mph or the very low-end of the EF0 range scale.

- Date: 4/28/11
- Time: 2:20 am EDT – 2:25 am EDT
- Rating: EF1
- Max Wind: 90 mph
- Max Path Width: 50 yards
- Path Length: 2.85 miles
- Starting Lat/Lon: 40.2012, -78.1405
- Ending Lat/Lon: 40.2119, -78.0884
- Injuries: 0
- Fatalities: 0

Huntingdon County

“Broad Top City Tornado”



Huntingdon County – “Broad Top City Tornado”

- The NWS in State College confirmed an EF1 tornado near Broad Top City in southern Huntingdon County. The tornado occurred between 0220 and 0225 AM EDT on 28 April 2011. The EF1 tornado first produced damage in Broad Top City, then skipped eastward producing sporadic damage along a path toward the intersection of SR 3019 and 994. Numerous pine trees were uprooted along the 3-4 mile path, and two houses sustained minor damage. The damage indicators observed during the storm survey were consistent with a maximum wind speed of 85 to 90 mph, putting the tornado in the lower-end of the EF1 rating category.

- Date: 4/28/11
- Time: 2:53 am EDT – 3:00 am EDT
- Rating: EF1
- Max Wind: 110 mph
- Max Path Width: 100 yards
- Path Length: 8.49 miles
- Starting Lat/Lon: 40.38, -77.59
- Ending Lat/Lon: 40.47, -77.48
- Injuries: 0
- Fatalities: 0

Juniata County

“East Waterford Tornado”



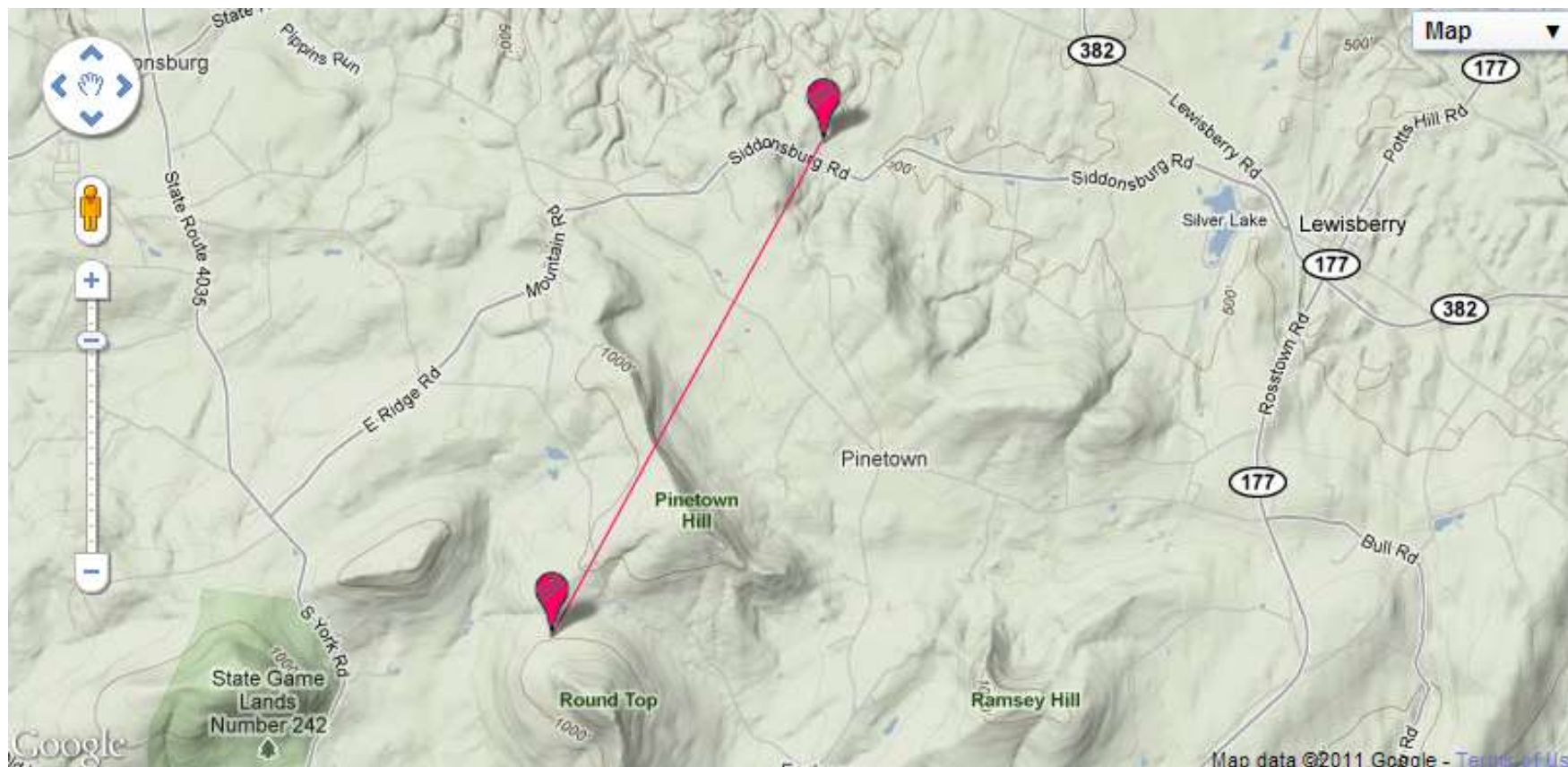
Juniata County – “East Waterford Tornado”

- The NWS in State College confirmed an EF1 tornado near East Waterford in Juniata County. The tornado occurred between 0253 and 0300 AM EDT on 28 April 2011. The EF1 tornado first produced damage on the east side of East Waterford, then skirted northeast along SR 75 producing sporadic damage along a well-defined path from Honey Grove to Seven Pines in Spruce Hill Township. The Hancock farm in Honey Grove sustained the most significant damage, as the farm house roof and several barns and farm sheds were destroyed. Numerous tree damage was observed along the tornado track which covered approximately 8 miles. Two barns were also damaged along Laurel Run near SR 850 at Burnt Church Road. Additional barns along SR 75 suffered minor to moderate roof damage, with roof debris scattered up to 200 yards away from its source location. The damage indicators, primarily those observed at the Hancock farm, were consistent with a maximum wind speed between 105 to 110 mph, putting the tornado in the upper-bound of the EF1 rating category.

- Date: 4/28/11
- Time: 5:55 am EDT – 6:00 am EDT
- Rating: EF2
- Max Wind: 130 mph
- Max Path Width: 100 yards
- Path Length: 2.62 miles
- Starting Lat/Lon: 40.1062, -76.9265
- Ending Lat/Lon: 40.1411, -76.9071
- Injuries: 0
- Fatalities: 0

York County

“Round Top Tornado”



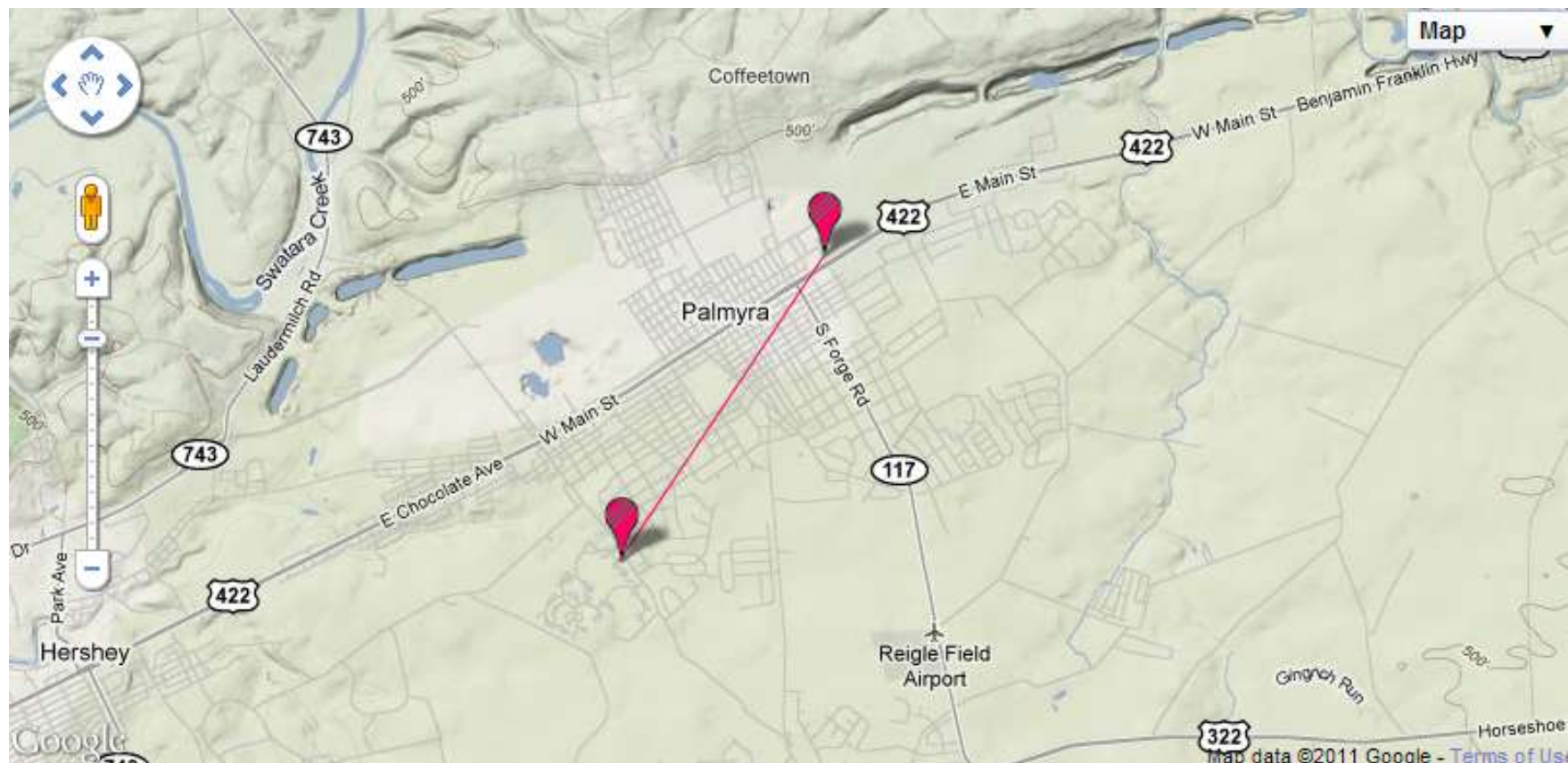
York County – “Round Top Tornado”

- The NWS in State College confirmed an EF2 tornado near the Roundtop Ski Resort in York County. The tornado occurred between 0555 and 0600 AM EDT on 28 April 2011. The EF2 tornado touched-down on the slopes near the main ski lift, then traveled down (northeast) the slope into the parking lot and produced damage to several buildings and destroyed one outbuilding. The tornado knocked down numerous trees as it crossed Roundtop Road and continued to move northeast up the west-side of Pinetown Hill. The strongest winds were observed at the top of Pinetown Hill where a high voltage transmission wire tower was twisted and collapsed. The tornado continued to travel northeast down Pinetown Hill across Pinetown Road, snapping and uprooting more trees. Near the end of the 2.5-3 mile track, one tree fell onto a house along Moores Mountain Road and destroyed a portion of the house. The tornado damage path ended just on the north side of Siddonsburg Road. The damage indicators observed during the storm survey, primarily the damage to the high voltage transmission wire tower were consistent with a maximum wind speed near 130 mph, putting the tornado in the upper-bound of the EF2 rating category.

- Date: 4/28/11
- Time: 6:20 am EDT – 6:23 am EDT
- Rating: EF1
- Max Wind: 90 mph
- Max Path Width: 100 yards
- Path Length: 1.92 miles
- Starting Lat/Lon: 40.2950, -76.6069
- Ending Lat/Lon: 40.3157, -76.5825
- Injuries: 0
- Fatalities: 0

Lebanon County

“Palmyra Tornado”



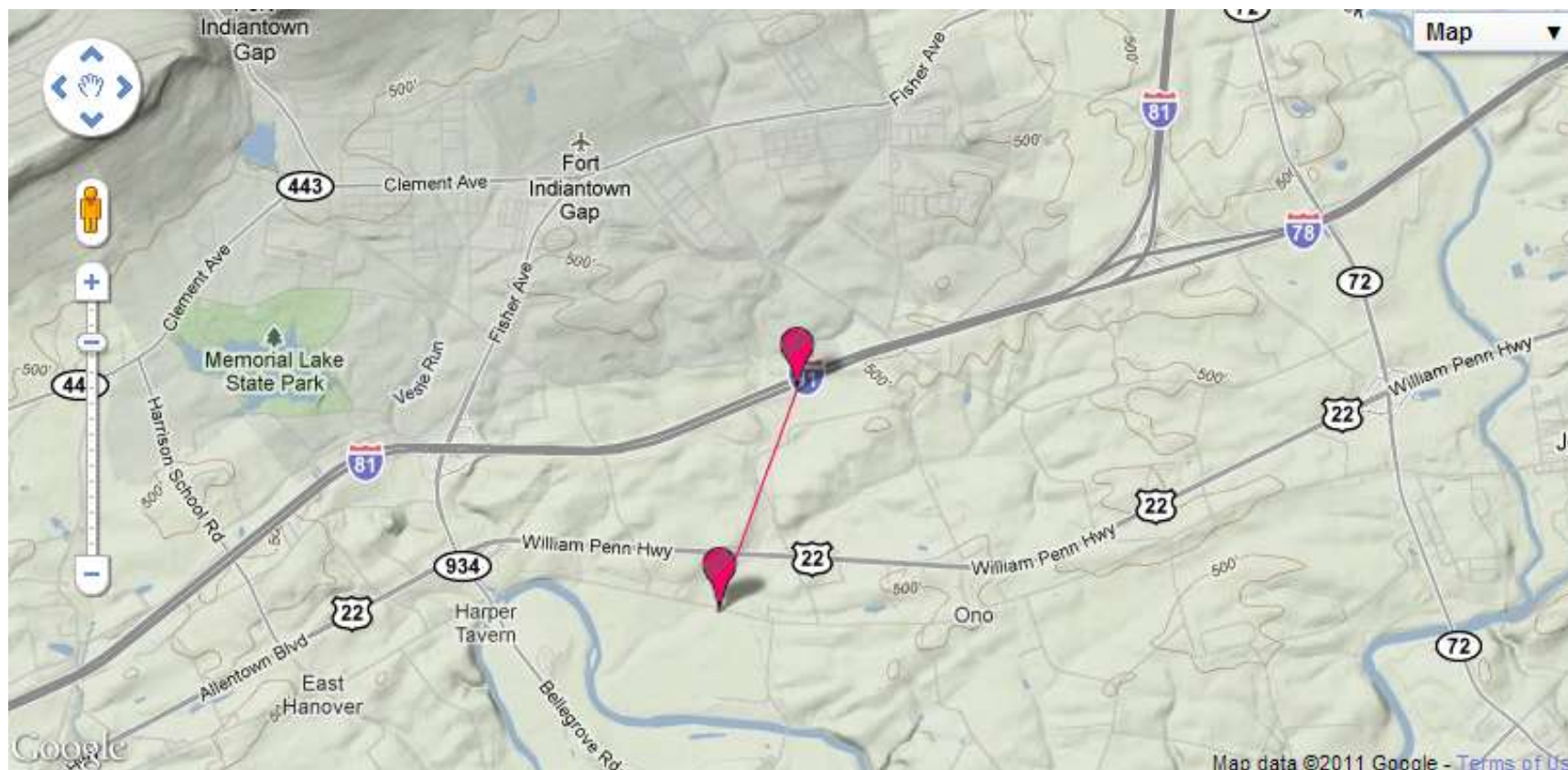
Lebanon County – “Palmyra Tornado”

- The NWS in State College confirmed an EF1 tornado near Palmyra in Lebanon County. The brief tornado occurred between 0620 and 0623 AM EDT on 28 April 2011. The EF1 tornado first produced damage just west of South Lingle Avenue (SR 3017) near West Pajabon Drive and proceeded along a 2 mile path northeast of the Palmyra Shopping Center along East Main Street (U.S. 422). Most of the damage indicators surveyed were associated with 75 to 85 mph winds, but a collapsed top floor of a house on 621 E. Main Street along with significant damage to an automobile dealership across the street supported maximum winds near 90 mph. Therefore, the tornado was rated a low-end EF1.

- Date: 4/28/11
- Time: 6:30 am EDT – 6:33 am EDT
- Rating: EF2
- Max Wind: 115 mph
- Max Path Width: 200 yards
- Path Length: 1.07 miles
- Starting Lat/Lon: 40.4041, -76.5589
- Ending Lat/Lon: 40.4178, -76.5494
- Injuries: 0
- Fatalities: 0

Lebanon County

“Ono Tornado”



Lebanon County – “Ono Tornado”

- The NWS in State College confirmed an EF2 tornado near Ono in Lebanon County. The tornado occurred between 0630 and 0633 AM EDT on 28 April 2011. The EF2 tornado first produced damage near the intersection of Reeds Creek Road and Jonestown Road about a half-mile west of Ono or about 2 miles east of Harpers Tavern. The wind damage to trees in the valley parallel to Reeds Creek Road was extensive with many snapped or downed trees and utility poles. The 1 mile tornado path continued northeast crossing just north of Interstate 81. In addition, two farms, a field warehouse and a few residences sustained significant damage on a knoll just east of Reeds Creek Road. A pair of high tension towers were also knocked down with considerable damage visible from Reeds Creek Road. There were no deaths or injuries, but one cow was injured. In total, 4 homes suffered minor to moderate damage and 6 farm buildings were either damaged or destroyed. The damage indicators observed during the storm survey, particularly the damage to the high tension wire towers, was consistent with a maximum wind speed near 115 mph, putting the tornado in the lower-end of the EF2 rating category.